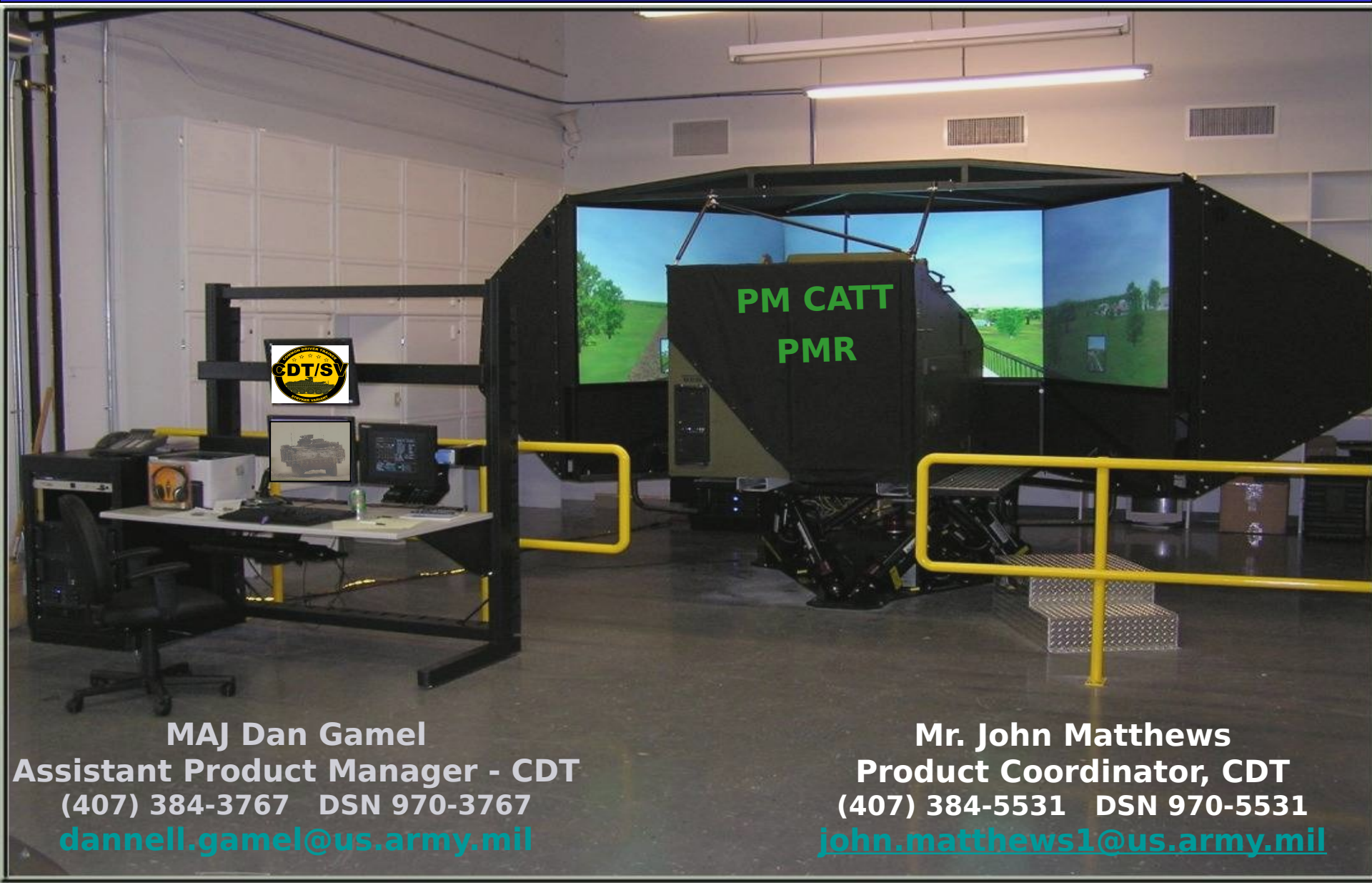
Common Driver Trainer
CDT/SV Program

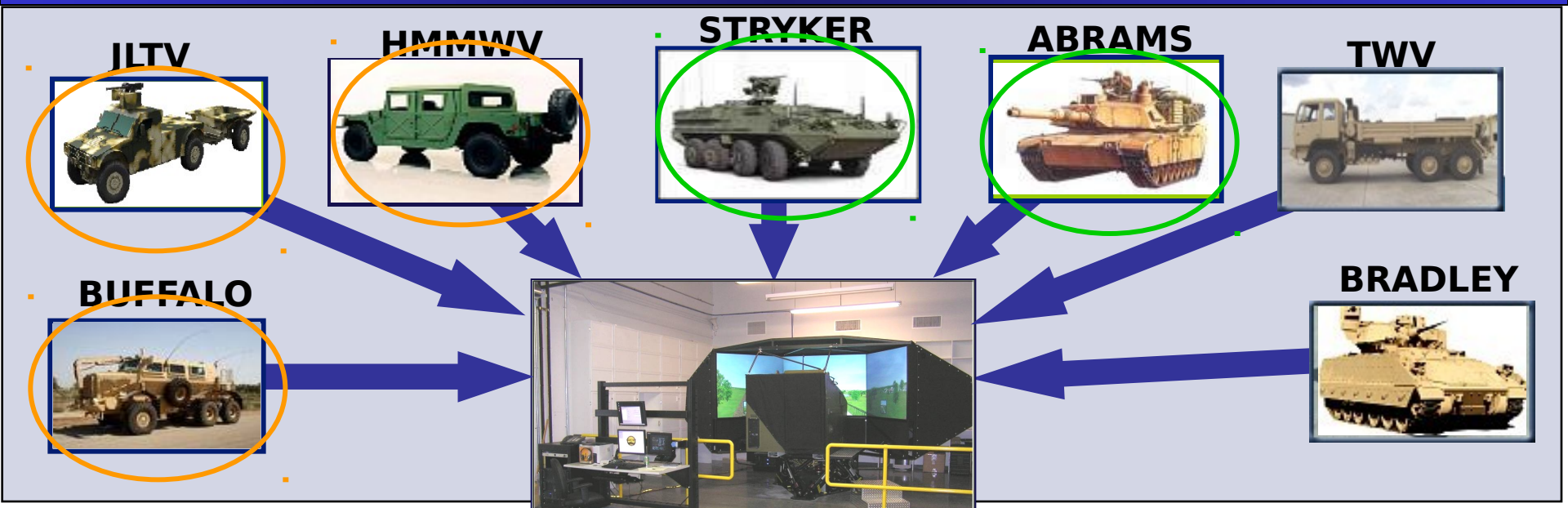


MAJ Dan Gamel
Assistant Product Manager - CDT
(407) 384-3767 DSN 970-3767
dannell.gamel@us.army.mil

Mr. John Matthews
Product Coordinator, CDT
(407) 384-5531 DSN 970-5531
john.matthews1@us.army.mil

Common Driver Trainer/Stryker Variant

CDT Vision



ZERO DOF

3 DOF "Seat-shaker"

6 DOF "Full Motion"

IOS/AAR

Common Driver Trainer/Stryker Variant

MISSION: **The Common Driver Trainer/ Stryker Variant provides initial and sustainment driver training at operational institutions and training installations.**

Additional Activity:

- Tank Cab and NRE development for PM HBCT
- Construction Equipment Critical Task Study
- Route Clearance vehicles
- CDT team participation in JLTV, ASV and UAHMMWV IPTs

CHARACTERISTICS/DESCRIPTION

- Consists of a simulated vehicle cab, instructor/operator station (IOS), After Action Review (AAR) station, visual system, 6-DOF motion system and a computational system. The Stryker Driver Trainer is the baseline of a CDT architecture
- The instructor is capable of selecting a visual scene, viewing the scene, introducing malfunctions and emergency control situations, monitoring each trainee's performance and providing recorded AAR feedback

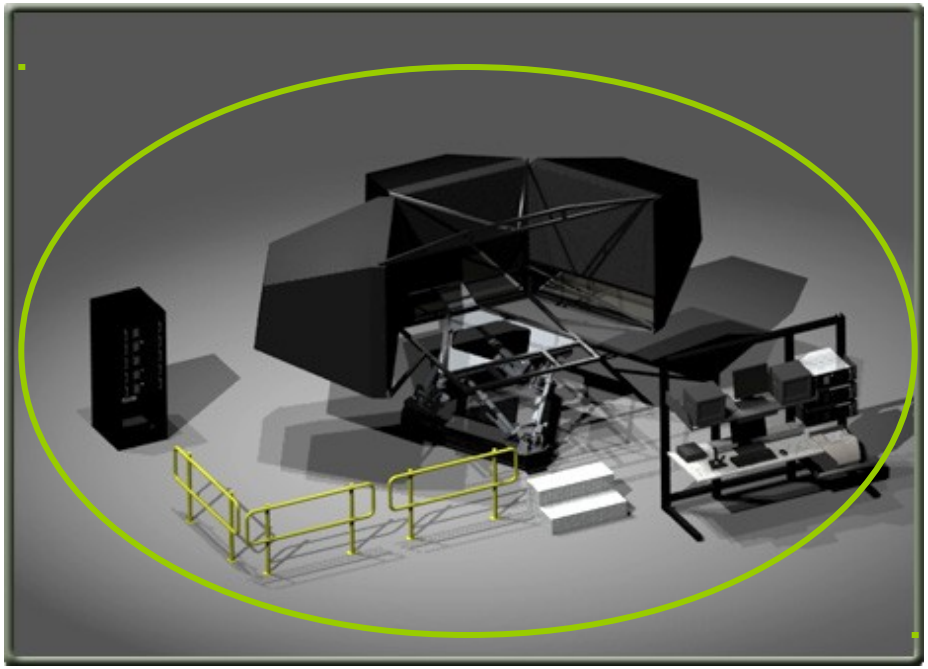
PROJECT TEAM

MAJ Dan Gamel	APM
John Matthews	Product Coord
Darryl Williams	Systems Eng
Gar Leung	Software Eng
Don Jones	Visual Eng
Dale Fritts	Logistics
Robin Hicks	Program Analyst
Lisa Parker	Contract Spec
Tom Watson	Pubs Logistician
Paul Lee	Software Eng
M[illegible]rehand	[illegible]s

STAKEHOLDERS

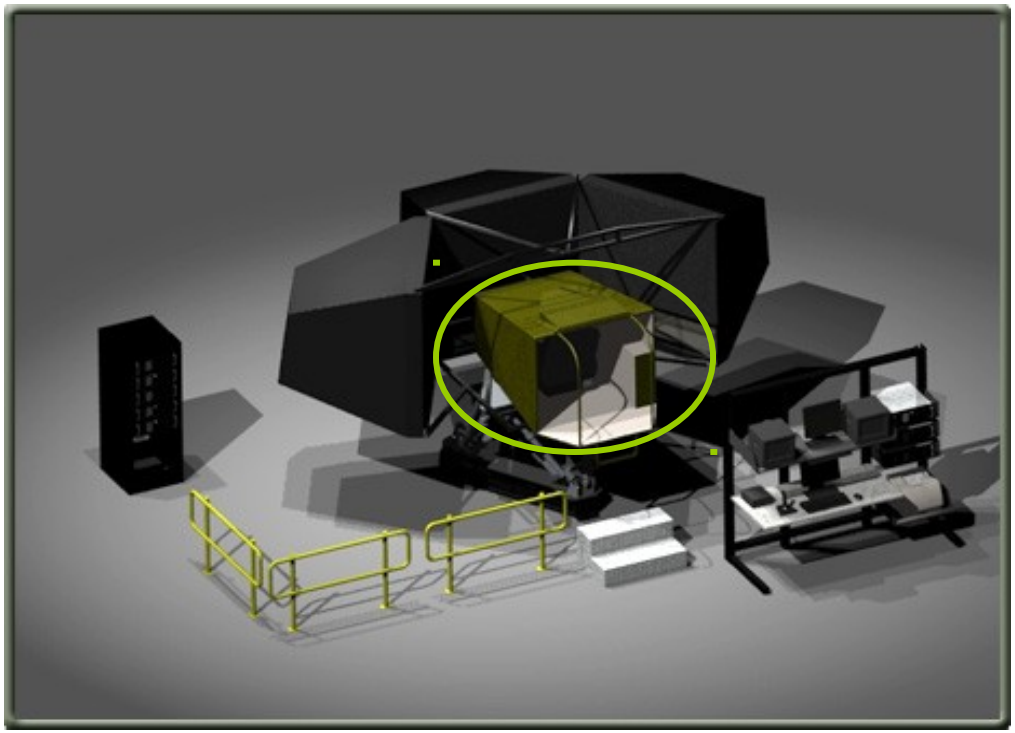
TCM Stryker/PM SBCT
PM/TSM Abrams
Ft. Leonard Wood, MO
Ft. Lewis, WA
Schofield Barracks, HI
Ft. Indiantown Gap, PA
Ft. Knox, KY
Ft. Benning. GA
Ft. Wainright, AK
Vilseck, Germany
Ft. Bliss, TX
MP School
Infantry School
Transportation School
TPIO-V
Army Driver Task Force
FORSCOM/ATSC

Common Driver Trainer/Stryker Variant Common Platform



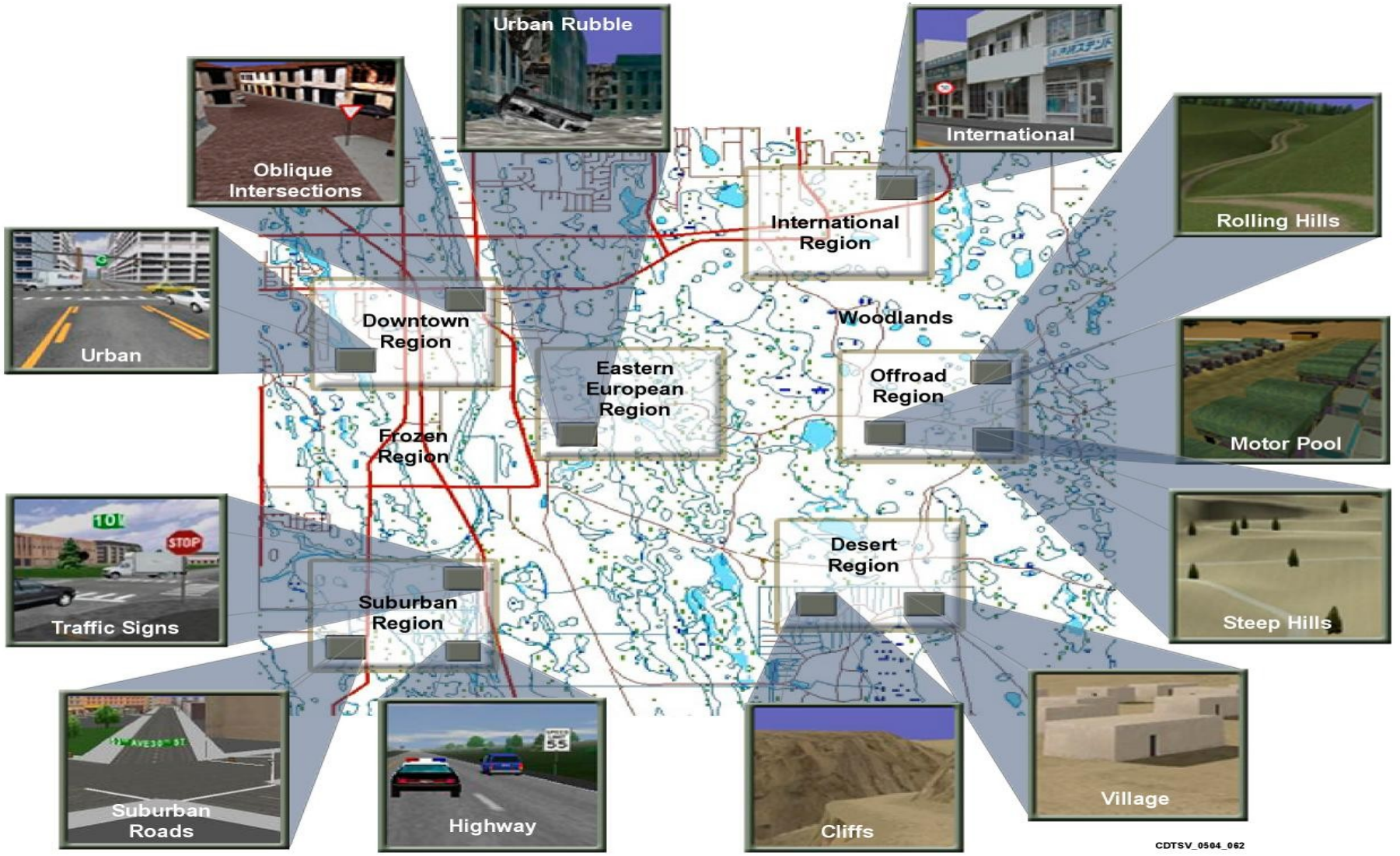
- IOS with Automatic Scoring AAR
- Computational Environment
- HLA/DIS
  - OOS integration
- Motion System
  - 6DOF Moog with 2200lb payload
  - Tune motion control algorithms based upon Stryker (or other) vehicle characteristics and training tasks
- Visual Display System
  - 80” VDU common with USA ODS
  - 1280x1024 projectors
- Image Generation
  - COTS vended item
    - EPX-50 identified
  - Inset mirrors
    - Active rear views using single IG channel
    - Appropriate for situational awareness training function
  - OOS compatible databases

Common Driver Trainer/Stryker Variant

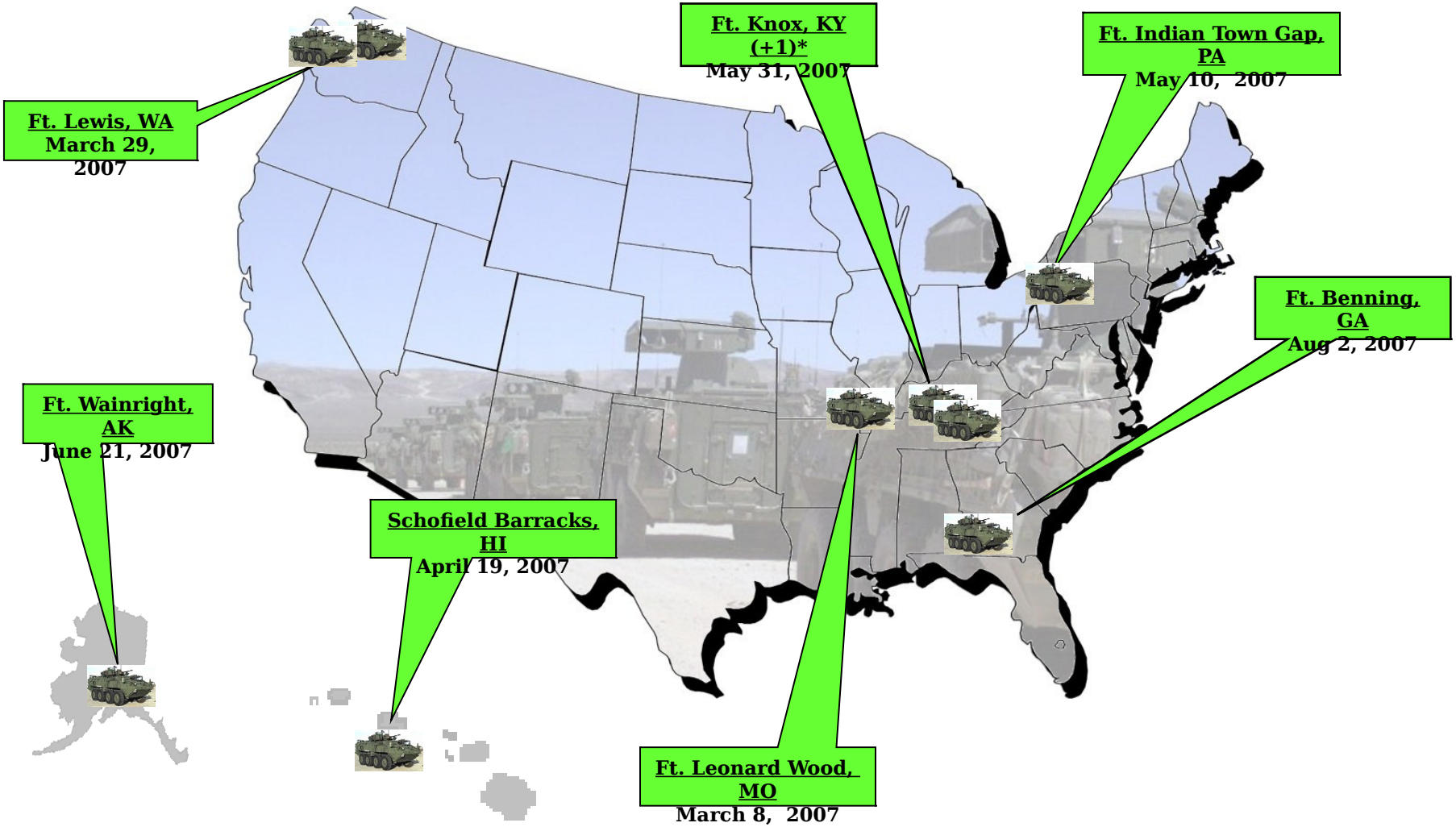


- **Stryker Crew Station:**
  - **High Fidelity replica manufactured crew station**
    - **Form, fit, and function interior**
    - **Functional exterior**
- **Stryker Vehicle Simulation:**
  - **Record aural cues**
  - **Vehicle particular scoring algorithms**
  - **Vehicle dynamic simulation**
  - **Stryker scenario development**
- **Stryker Configurations Supported:**
  - **Infantry Carrier Vehicle (ICV)**
  - **Command Vehicle (CV)**
  - **Mobile Gun System (MGS)**
  - **Fire Support Vehicle (FSV)**
  - **Medical Evacuation (MEV)**
  - **Mortar Carrier (MC)**
  - **Engineer Squad Vehicle (ESV)**
  - **Anti-tank Guided Missile (ATGM)**
  - **NBC Reconnaissance (NBC RV)**
  - **Reconnaissance Vehicle (RV)**
- **Flexibility:**
  - **add on of future Stryker configurations available as a part of CDT program.**
  - **interchangeable with other CDT variants**

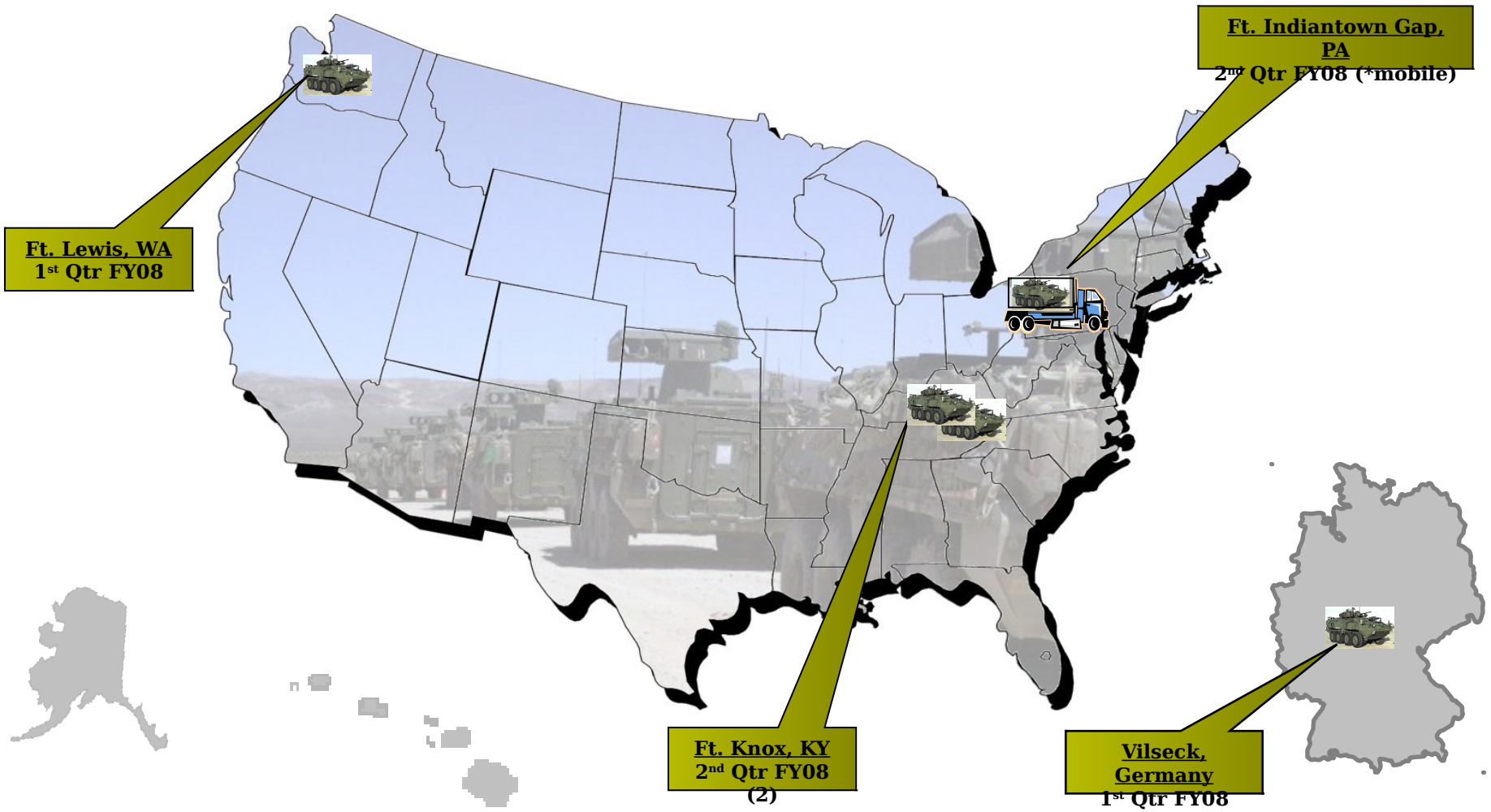
Common Driver Trainer/Stryker Variant
Visual Training Database



Common Driver Trainer/Stryker Variant



Common Driver Trainer/Stryker Variant



Common Driver Trainer/TDV
Tank Driver Variant

- $2M funding received from PM HBCT for Non-Recurring

  Engineering (NRE), development and production of one

  (1) CDT/Tank Variant cab for Ft. Knox (Phase I).

- System Requirements Document (SRD) is complete.

- Request for Proposal (RFP) will go to the vendor 21 Sep 07

- Advised PM HBCT of the necessary POM $$$s needed for

  POM 8-13 in order to completed development/production

  of 18 CDT/TVs (Tank Variant).

- Phase II consists of the development/production of 1

  additional Tank Cab and 2 motion platforms. Phase II also

  includes IOS, AAR, scenario development and training

  management). Phase II is currently unfunded

PM CE/MHE Initiatives
Route Clearance Suite/Hydraulic Excavator

Status:

- PM Construction Engineering/Material Handling Equipment has initiated funding and requirement discussions

  with PM GCTT/APM CDT for:

  - Mobile Route Clearance Vehicle Suite (MRCV-S)
    - Mine Protective Clearance Vehicle (MPCV) – Armored IED interrogator “Buffalo”
    - Medium Min Protective Vehicle (MMPV) – Armored reconnaissance “RG3-31”
    - Vehicle Mounted Mine Detector - (VMMD)
  - CDT/Hydraulic Excavator cab and NRE

- Working with CE/MHE community to determine system and reconfigurability requirements.
- In discussions with PM CE/MHE and schoolhouse regarding quantity and type of systems to be developed

  for the Ft. hool.